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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,619	09/06/2006	Stephen Hayes	82047004/P3143-US	7958
25005 7590 10/09/2007 DEWITT ROSS & STEVENS S.C. 8000 EXCELSIOR DR SUITE 401 MADISON, WI 53717-1914			EXAMINER KELLEHER, WILLIAM J	
			ART UNIT 3673	PAPER NUMBER
			MAIL DATE 10/09/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/598,619	Applicant(s) HAYES ET AL.	
	Examiner Bill Kelleher	Art Unit 3673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 18 objected to because of the following informalities: The preamble of Claim 18 should be consistent with the preamble of the claim from which it depends. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1-13 are directed to an apparatus (profiling surface), however, the claims substantially describe how the surface operates. It is unclear to the Examiner whether Applicant desires Patent protection for the structural differences between the claimed invention and the prior art, or the differences in operation between the claimed invention and the prior art.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 6-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Travis (U.S. Patent 5,195,198) in view of Adams (U.S. Patent 3,913,153).

Regarding Claim 1, Travis discloses a profiling surface for a bed or trolley comprising a frame supporting the surface, the surface having at least a back section and a thigh section, the back and thigh sections pivotally connected to the frame for movement from a horizontal position to a raised position, control means driving actuators to profile the sections, Travis does not explicitly state that the control means raises the back and thigh sections simultaneously from a fiat position until they reach a substantially equivalent angle, the thigh section remaining in that position and the back section continuing to be raised until it reaches its maximum condition, and for return of the sections to the fiat position, the control means initially only lowering the back section until it reaches a substantially equivalent position to the thigh section position, and then simultaneously lowering both the back and thigh sections to the fiat position. However, Travis is capable of operating as claimed. Furthermore, Adams discloses in Column 2, Line 58 through Column 3, Line 27 an operable head section that upon crossing a threshold will allow a knee portion to move. Adams discloses, "When the head portion lowers to the horizontal, the knee portion should similarly flatten" in combination with holding the knee portion steady until the head portion crosses a threshold. This is considered a suggestion of lowering both portions at substantially equal angles. While Adams only discloses the lowering portion of the claimed operation, one of ordinary skill in the art would have recognized that the operation could be reversed, allowing the

head and knee portions to similarly lift from the horizontal until the knee portion reaches a threshold (for example the 30 degrees suggested by Adams), then allowing the head portion to continue (for example to vertical suggested by Adams).

Regarding Claim 2, Adams discloses letting the head portion move (from horizontal downward) without the knee portion moving.

Regarding Claim 3, Adams discloses "The bed position indicators at 16 provide another type of input into the control circuitry. As one of their several functions, they indicate when a bed portion has reached its limit of operation in order to turn off its motor." One of ordinary skill in the art would have recognized that Travis has a fully reclined and a fully extended position, both of which constitute "limits of operation." Furthermore, Adams discloses only lowering the knee portion when the head portion is at a desired level. This is considered a third limit switch equating to the fully extended condition of the thigh actuator.

Regarding Claim 4, Adams discloses letting the head portion move (from horizontal downward) without the knee portion moving.

Regarding Claim 6, Travis as modified discloses a profiling surface for a bed or trolley comprising:

- (i) a frame supporting the profiling surface;
- (ii) a back section pivotally connected to the frame, the back section including a back section actuator drivable to angularly incline the back section between horizontal and non-horizontal positions;

(iii) a thigh section pivotally connected to the frame, the thigh section including a thigh section actuator drivable to angularly incline the thigh section between horizontal and non-horizontal positions; wherein:

a. during an auto-contour raise command issued by a user, the actuators are controlled to:

(1) simultaneously (Adams discloses similar movement) pivotally raise the back and thigh sections toward each other if the back and thigh sections are each between a respective lowermost inclination and a respective intermediate inclination greater than the lowermost inclination;

(2) raise the back section, without raising the thigh section, if the back section is between its intermediate inclination and a maximum elevation; and

b. during an auto-contour lower command issued by a user, the actuators are controlled to:

(1) lower the back section, without lowering the thigh section, if the back section is between its maximum inclination and its intermediate inclination;

(2) simultaneously pivotally lower the back and thigh sections away from each other if the back and thigh sections are each between their respective intermediate elevations and their respective

lowermost inclinations. Adams discloses this occurring lower than 30 degrees.

Regarding Claim 7, Adams discloses similarly flattening the head and knee sections. This is considered a suggestion of keeping the sections at substantially similar angles.

Regarding Claim 8, Travis is capable of achieving a horizontal configuration, while Adams discloses flattening the sections. This is considered a head and thigh sections both being at a 180-degree configuration.

Regarding Claim 9, Adams discloses allowing a head section to achieve a vertical configuration while keeping a knee section at a 30 degree inclination.

Regarding Claim 10, Adams discloses the claimed limit switches. See description for Claim 3.

Regarding Claim 11, Adams discloses allowing a head section to move (from vertical to 30 degrees) while keeping the knee section stationary until the head section reaches 30 degrees.

Regarding Claim 12, Adams discloses using a single control to operate both the head and knee section. Furthermore, one of ordinary skill in the art would have recognized that controlling multiple sections with a single control would make operation of the bed easier.

Regarding Claim 13, Adams discloses similarly flattening the sections. This is considered a suggestion of keeping the head and knee sections at substantially similar angles.

Regarding Claim 14, Travis as modified discloses a method for actuating a profiling surface for a bed or trolley, wherein:

- (i) the bed or trolley includes a frame supporting the profiling surface,
 - (ii) the profiling surface includes a back section pivotally connected to the frame, the back section including at least one back section actuator drivable to angularly incline the back section between horizontal and non-horizontal positions,
 - (iii) the profiling surface includes a thigh section pivotally connected to the frame, the thigh section including at least one thigh section actuator drivable to angularly incline the thigh section between horizontal and non-horizontal positions,
- the method comprising the steps of:

a. during an auto-contour raise command issued by a user, commanding the actuators to:

- (1) simultaneously pivotally raise the back and thigh sections toward each other if the back and thigh sections are each between a respective lowermost inclination and a respective intermediate inclination greater than the lowermost inclination; and
- (2) raise the back section, without raising the thigh section, if the back section is between its intermediate inclination and a maximum elevation; and

b. during an auto-contour lower command issued by a user, commanding the actuators to:

- (1) lower the back section, without lowering the thigh section, if the back section is between its maximum inclination and its intermediate inclination;
- (2) simultaneously pivotally lower the back and thigh sections away from each other if the back and thigh sections are each between their respective intermediate elevations and their respective lowermost inclinations.

Regarding Claim 15, Adams discloses similarly flattening the sections. This is considered a suggestion of keeping the head and knee sections at substantially similar angles.

Regarding Claim 16, Travis is capable of achieving a horizontal configuration, while Adams discloses flattening the sections. This is considered a head and thigh sections both being at a 180-degree configuration.

Regarding Claim 17, Adams discloses using a single control to operate both the head and knee section. Furthermore, one of ordinary skill in the art would have recognized that controlling multiple sections with a single control would make operation of the bed easier.

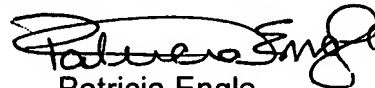
Regarding Claim 18, Adams discloses similarly flattening the sections. This is considered a suggestion of keeping the head and knee sections at substantially similar angles.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bill Kelleher whose telephone number is (571)-272-7753. The examiner can normally be reached on Monday - Friday 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Engle can be reached on (571)-272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Patricia Engle
Supervisory Patent Examiner
Art Unit 3673

BK

9/27/07